

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/509,484
Source: PG/10
Date Processed by STIC: 11/2/05

ENTERED



PCT

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/509,484

DATE: 11/02/2005

TIME: 09:41:02

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\11022005\J509484.raw

```

3 <110> APPLICANT: Takeda Chemical Industries, Ltd.
5 <120> TITLE OF INVENTION: Novel Screening Method
7 <130> FILE REFERENCE: P04-117PCT
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/509,484
C--> 9 <141> CURRENT FILING DATE: 2004-09-27
9 <150> PRIOR APPLICATION NUMBER: JP 2002-093045
10 <151> PRIOR FILING DATE: 2002-03-28
12 <150> PRIOR APPLICATION NUMBER: JP 2002-361580
13 <151> PRIOR FILING DATE: 2002-12-13
15 <160> NUMBER OF SEQ ID NOS: 10
17 <170> SOFTWARE: PatentIn version 3.1
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 957
21 <212> TYPE: DNA
22 <213> ORGANISM: Rattus sp.
24 <220> FEATURE:
25 <221> NAME/KEY: CDS
26 <222> LOCATION: (1)..(957)
27 <223> OTHER INFORMATION: rat-derived rCB7T084
29 <400> SEQUENCE: 1
30 atg aac tac act cct tat agc agc cca gcc cca ggt ctg acc atc agc      48
31 Met Asn Tyr Thr Pro Tyr Ser Ser Pro Ala Pro Gly Leu Thr Ile Ser
32 1          5          10          15
33 ccc acc atg gac cct gtg acc tgg gtt tac ttt tca gtg aca ttc ctg      96
34 Pro Thr Met Asp Pro Val Thr Trp Val Tyr Phe Ser Val Thr Phe Leu
35          20          25          30
36 gcc atg gcc acc tgt gtg tgt ggg ata gtg ggc aac tcc atg gtg att      144
37 Ala Met Ala Thr Cys Val Cys Gly Ile Val Gly Asn Ser Met Val Ile
38          35          40          45
39 tgg cta ctg agt ttc cac agt gtg cag agg tcc ccc ttc tgc acc tac      192
40 Trp Leu Leu Ser Phe His Ser Val Gln Arg Ser Pro Phe Cys Thr Tyr
41          50          55          60
42 gtg ctc aac ctg gcg gtg gcc gac ctc ctc ttc ctg ctc tgc atg gcc      240
43 Val Leu Asn Leu Ala Val Ala Asp Leu Leu Phe Leu Leu Cys Met Ala
44 65          70          75          80
45 tcc ctg ctc agt ctg gaa aca ggg ccc ctg ctc aca gcc agc acc tcc      288
46 Ser Leu Leu Ser Leu Glu Thr Gly Pro Leu Leu Thr Ala Ser Thr Ser
47          85          90          95
48 gcc aga gtc tac gag ggg atg aag aga atc aag tac ttt gcc tac aca      336
49 Ala Arg Val Tyr Glu Gly Met Lys Arg Ile Lys Tyr Phe Ala Tyr Thr
50          100         105         110
51 gca ggc ctg agc ctg ctg acg gcc atc agc acc cag cgc tgt ctc tcc      384
52 Ala Gly Leu Ser Leu Leu Thr Ala Ile Ser Thr Gln Arg Cys Leu Ser

```

RAW SEQUENCE LISTING

DATE: 11/02/2005

PATENT APPLICATION: US/10/509,484

TIME: 09:41:02

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\11022005\J509484.raw

```

53          115          120          125
54 gtg ctt ttc ccc atc tgg tat aag tgc cac cgg ccc cag cac ctg tcg      432
55 Val Leu Phe Pro Ile Trp Tyr Lys Cys His Arg Pro Gln His Leu Ser
56          130          135          140
57 ggg gtg gta tgt ggt gtg ctg tgg gca ctg gcc ctc ctg atg aac ttc      480
58 Gly Val Val Cys Gly Val Leu Trp Ala Leu Ala Leu Leu Met Asn Phe
59 145          150          155          160
60 ctg gct tct ttc ttc tgt gtt caa ttc tgg cat ccc gac aaa tac cag      528
61 Leu Ala Ser Phe Phe Cys Val Gln Phe Trp His Pro Asp Lys Tyr Gln
62          165          170          175
63 tgc ttc aag gtg gac atg gtt ttc aac agt ctt atc ctg ggg atc ttc      576
64 Cys Phe Lys Val Asp Met Val Phe Asn Ser Leu Ile Leu Gly Ile Phe
65          180          185          190
66 atg ccc gtc atg gtc ctg acc agc gcc atc atc ttc atc cgc atg cga      624
67 Met Pro Val Met Val Leu Thr Ser Ala Ile Ile Phe Ile Arg Met Arg
68          195          200          205
69 aag aac agc ctg ctg cag aga cgg cag cct cgg cgg ctc tac gtg gtc      672
70 Lys Asn Ser Leu Leu Gln Arg Arg Gln Pro Arg Arg Leu Tyr Val Val
71          210          215          220
72 atc ctg act tcc gtc ctt gtc ttc ctt acc tgt tct ctg ccg ttg ggc      720
73 Ile Leu Thr Ser Val Leu Val Phe Leu Thr Cys Ser Leu Pro Leu Gly
74 225          230          235          240
75 atc aac tgg ttc tta ctc tac tgg gtg gaa ctg ccg cag gcc gtg agg      768
76 Ile Asn Trp Phe Leu Leu Tyr Trp Val Glu Leu Pro Gln Ala Val Arg
77          245          250          255
78 ctc ctg tac gtc tgc tca tca cgc ttc tcc tcg tct ttg agc agc agc      816
79 Leu Leu Tyr Val Cys Ser Ser Arg Phe Ser Ser Ser Leu Ser Ser Ser
80          260          265          270
81 gcc aac cca gtc atc tac ttc ctc gtg ggc agc cag aag agc cac cgg      864
82 Ala Asn Pro Val Ile Tyr Phe Leu Val Gly Ser Gln Lys Ser His Arg
83          275          280          285
84 ctg cag gag tct ctg ggt gct gtg ctg ggg cgg gca ctt cag gac gag      912
85 Leu Gln Glu Ser Leu Gly Ala Val Leu Gly Arg Ala Leu Gln Asp Glu
86          290          295          300
87 cct gaa ggc agg gag acg cca tcc aca tgt act aat gat ggg gtc      957
88 Pro Glu Gly Arg Glu Thr Pro Ser Thr Cys Thr Asn Asp Gly Val
89 305          310          315
91 <210> SEQ ID NO: 2
92 <211> LENGTH: 319
93 <212> TYPE: PRT
94 <213> ORGANISM: Rattus sp.
96 <400> SEQUENCE: 2
97 Met Asn Tyr Thr Pro Tyr Ser Ser Pro Ala Pro Gly Leu Thr Ile Ser
98 1          5          10          15
99 Pro Thr Met Asp Pro Val Thr Trp Val Tyr Phe Ser Val Thr Phe Leu
100          20          25          30
101 Ala Met Ala Thr Cys Val Cys Gly Ile Val Gly Asn Ser Met Val Ile
102          35          40          45
103 Trp Leu Leu Ser Phe His Ser Val Gln Arg Ser Pro Phe Cys Thr Tyr

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/509,484

DATE: 11/02/2005

TIME: 09:41:02

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\11022005\J509484.raw

```

104      50                      55                      60
105 Val Leu Asn Leu Ala Val Ala Asp Leu Leu Phe Leu Leu Cys Met Ala
106 65                      70                      75                      80
107 Ser Leu Leu Ser Leu Glu Thr Gly Pro Leu Leu Thr Ala Ser Thr Ser
108                      85                      90                      95
109 Ala Arg Val Tyr Glu Gly Met Lys Arg Ile Lys Tyr Phe Ala Tyr Thr
110                      100                      105                      110
111 Ala Gly Leu Ser Leu Leu Thr Ala Ile Ser Thr Gln Arg Cys Leu Ser
112                      115                      120                      125
113 Val Leu Phe Pro Ile Trp Tyr Lys Cys His Arg Pro Gln His Leu Ser
114      130                      135                      140
115 Gly Val Val Cys Gly Val Leu Trp Ala Leu Ala Leu Leu Met Asn Phe
116 145                      150                      155                      160
117 Leu Ala Ser Phe Phe Cys Val Gln Phe Trp His Pro Asp Lys Tyr Gln
118                      165                      170                      175
119 Cys Phe Lys Val Asp Met Val Phe Asn Ser Leu Ile Leu Gly Ile Phe
120                      180                      185                      190
121 Met Pro Val Met Val Leu Thr Ser Ala Ile Ile Phe Ile Arg Met Arg
122                      195                      200                      205
123 Lys Asn Ser Leu Leu Gln Arg Arg Gln Pro Arg Arg Leu Tyr Val Val
124      210                      215                      220
125 Ile Leu Thr Ser Val Leu Val Phe Leu Thr Cys Ser Leu Pro Leu Gly
126 225                      230                      235                      240
127 Ile Asn Trp Phe Leu Leu Tyr Trp Val Glu Leu Pro Gln Ala Val Arg
128                      245                      250                      255
129 Leu Leu Tyr Val Cys Ser Ser Arg Phe Ser Ser Ser Leu Ser Ser Ser
130                      260                      265                      270
131 Ala Asn Pro Val Ile Tyr Phe Leu Val Gly Ser Gln Lys Ser His Arg
132                      275                      280                      285
133 Leu Gln Glu Ser Leu Gly Ala Val Leu Gly Arg Ala Leu Gln Asp Glu
134      290                      295                      300
135 Pro Glu Gly Arg Glu Thr Pro Ser Thr Cys Thr Asn Asp Gly Val
136 305                      310                      315
138 <210> SEQ ID NO: 3
139 <211> LENGTH: 963
140 <212> TYPE: DNA
141 <213> ORGANISM: Homo sapiens
143 <220> FEATURE:
144 <221> NAME/KEY: CDS
145 <222> LOCATION: (1)..(963)
146 <223> OTHER INFORMATION: human-derived TGR7
148 <400> SEQUENCE: 3
149 atg aac cag act ttg aat agc agt ggg acc gtg gag tca gcc cta aac      48
150 Met Asn Gln Thr Leu Asn Ser Ser Gly Thr Val Glu Ser Ala Leu Asn
151 1      5      10      15
152 tat tcc aga ggg agc aca gtg cac acg gcc tac ctg gtg ctg agc tcc      96
153 Tyr Ser Arg Gly Ser Thr Val His Thr Ala Tyr Leu Val Leu Ser Ser
154      20      25      30
155 ctg gcc atg ttc acc tgc ctg tgc ggg atg gca ggc aac agc atg gtg      144

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/509,484

DATE: 11/02/2005

TIME: 09:41:02

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\11022005\J509484.raw

| | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 156 | Leu | Ala | Met | Phe | Thr | Cys | Leu | Cys | Gly | Met | Ala | Gly | Asn | Ser | Met | Val | |
| 157 | | | 35 | | | | | 40 | | | | | 45 | | | | |
| 158 | atc | tgg | ctg | ctg | ggc | ttt | cga | atg | cac | agg | aac | ccc | ttc | tgc | atc | tat | 192 |
| 159 | Ile | Trp | Leu | Leu | Gly | Phe | Arg | Met | His | Arg | Asn | Pro | Phe | Cys | Ile | Tyr | |
| 160 | | 50 | | | | | 55 | | | | | 60 | | | | | |
| 161 | atc | ctc | aac | ctg | gcg | gca | gcc | gac | ctc | ctc | ttc | ctc | ttc | agc | atg | gct | 240 |
| 162 | Ile | Leu | Asn | Leu | Ala | Ala | Asp | Leu | Leu | Phe | Leu | Phe | Ser | Met | Ala | | |
| 163 | 65 | | | | 70 | | | | | 75 | | | | | | 80 | |
| 164 | tcc | acg | ctc | agc | ctg | gaa | acc | cag | ccc | ctg | gtc | aat | acc | act | gac | aag | 288 |
| 165 | Ser | Thr | Leu | Ser | Leu | Glu | Thr | Gln | Pro | Leu | Val | Asn | Thr | Thr | Asp | Lys | |
| 166 | | | | | 85 | | | | 90 | | | | | | 95 | | |
| 167 | gtc | cac | gag | ctg | atg | aag | aga | ctg | atg | tac | ttt | gcc | tac | aca | gtg | ggc | 336 |
| 168 | Val | His | Glu | Leu | Met | Lys | Arg | Leu | Met | Tyr | Phe | Ala | Tyr | Thr | Val | Gly | |
| 169 | | | | 100 | | | | | 105 | | | | | 110 | | | |
| 170 | ctg | agc | ctg | ctg | acg | gcc | atc | agc | acc | cag | cgc | tgt | ctc | tct | gtc | ctc | 384 |
| 171 | Leu | Ser | Leu | Leu | Thr | Ala | Ile | Ser | Thr | Gln | Arg | Cys | Leu | Ser | Val | Leu | |
| 172 | | | 115 | | | | | 120 | | | | | 125 | | | | |
| 173 | ttc | cct | atc | tgg | ttc | aag | tgt | cac | cgg | ccc | agg | cac | ctg | tca | gcc | tgg | 432 |
| 174 | Phe | Pro | Ile | Trp | Phe | Lys | Cys | His | Arg | Pro | Arg | His | Leu | Ser | Ala | Trp | |
| 175 | | 130 | | | | 135 | | | | | 140 | | | | | | |
| 176 | gtg | tgt | ggc | ctg | ctg | tgg | acg | ctc | tgt | ctc | ctg | atg | aac | ggg | ttg | acc | 480 |
| 177 | Val | Cys | Gly | Leu | Leu | Trp | Thr | Leu | Cys | Leu | Met | Asn | Gly | Leu | Thr | | |
| 178 | 145 | | | | 150 | | | | | 155 | | | | | 160 | | |
| 179 | tct | tcc | ttc | tgc | agc | aag | ttc | ttg | aaa | ttc | aat | gaa | gat | cgg | tgc | ttc | 528 |
| 180 | Ser | Ser | Phe | Cys | Ser | Lys | Phe | Leu | Lys | Phe | Asn | Glu | Asp | Arg | Cys | Phe | |
| 181 | | | | | 165 | | | | 170 | | | | | | 175 | | |
| 182 | agg | gtg | gac | atg | gtc | cag | gcc | gcc | ctc | atc | atg | ggg | gtc | tta | acc | cca | 576 |
| 183 | Arg | Val | Asp | Met | Val | Gln | Ala | Ala | Leu | Ile | Met | Gly | Val | Leu | Thr | Pro | |
| 184 | | | 180 | | | | | 185 | | | | | 190 | | | | |
| 185 | gtg | atg | act | ctg | tcc | agc | ctg | acc | ctc | ttt | gtc | tgg | gtg | cgg | agg | agc | 624 |
| 186 | Val | Met | Thr | Leu | Ser | Ser | Leu | Thr | Leu | Phe | Val | Trp | Val | Arg | Arg | Ser | |
| 187 | | | 195 | | | | | 200 | | | | | 205 | | | | |
| 188 | tcc | cag | cag | tgg | cgg | cgg | cag | ccc | aca | cgg | ctg | ttc | gtg | gtg | gtc | ctg | 672 |
| 189 | Ser | Gln | Gln | Trp | Arg | Arg | Gln | Pro | Thr | Arg | Leu | Phe | Val | Val | Val | Leu | |
| 190 | | 210 | | | | 215 | | | | | 220 | | | | | | |
| 191 | gcc | tct | gtc | ctg | gtg | ttc | ctc | atc | tgt | tcc | ctg | cct | ctg | agc | atc | tac | 720 |
| 192 | Ala | Ser | Val | Leu | Val | Phe | Leu | Ile | Cys | Ser | Leu | Pro | Leu | Ser | Ile | Tyr | |
| 193 | 225 | | | | 230 | | | | | 235 | | | | | 240 | | |
| 194 | tgg | ttt | gtg | ctc | tac | tgg | ttg | agc | ctg | ccg | ccc | gag | atg | cag | gtc | ctg | 768 |
| 195 | Trp | Phe | Val | Leu | Tyr | Trp | Leu | Ser | Leu | Pro | Pro | Glu | Met | Gln | Val | Leu | |
| 196 | | | | 245 | | | | | 250 | | | | | 255 | | | |
| 197 | tgc | ttc | agc | ttg | tca | cgc | ctc | tcc | tcg | tcc | gta | agc | agc | agc | gcc | aac | 816 |
| 198 | Cys | Phe | Ser | Leu | Ser | Arg | Leu | Ser | Ser | Ser | Val | Ser | Ser | Ser | Ala | Asn | |
| 199 | | | 260 | | | | | 265 | | | | | 270 | | | | |
| 200 | ccc | gtc | atc | tac | ttc | ctg | gtg | ggc | agc | cgg | agg | agc | cac | agg | ctg | ccc | 864 |
| 201 | Pro | Val | Ile | Tyr | Phe | Leu | Val | Gly | Ser | Arg | Arg | Ser | His | Arg | Leu | Pro | |
| 202 | | | 275 | | | | | 280 | | | | | 285 | | | | |
| 203 | acc | agg | tcc | ctg | ggg | act | gtg | ctc | caa | cag | gcg | ctt | cgc | gag | gag | ccc | 912 |
| 204 | Thr | Arg | Ser | Leu | Gly | Thr | Val | Leu | Gln | Gln | Ala | Leu | Arg | Glu | Glu | Pro | |

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/509,484

DATE: 11/02/2005

TIME: 09:41:02

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\11022005\J509484.raw

```

205      290      295      300
206 gag ctg gaa ggt ggg gag acg ccc acc gtg ggc acc aat gag atg ggg      960
207 Glu Leu Glu Gly Gly Glu Thr Pro Thr Val Gly Thr Asn Glu Met Gly
208 305      310      315      320
209 gct
210 Ala
212 <210> SEQ ID NO: 4
213 <211> LENGTH: 321
214 <212> TYPE: PRT
215 <213> ORGANISM: Homo sapiens
217 <400> SEQUENCE: 4
218 Met Asn Gln Thr Leu Asn Ser Ser Gly Thr Val Glu Ser Ala Leu Asn
219 1      5      10      15
220 Tyr Ser Arg Gly Ser Thr Val His Thr Ala Tyr Leu Val Leu Ser Ser
221      20      25      30
222 Leu Ala Met Phe Thr Cys Leu Cys Gly Met Ala Gly Asn Ser Met Val
223      35      40      45
224 Ile Trp Leu Leu Gly Phe Arg Met His Arg Asn Pro Phe Cys Ile Tyr
225      50      55      60
226 Ile Leu Asn Leu Ala Ala Asp Leu Leu Phe Leu Phe Ser Met Ala
227 65      70      75      80
228 Ser Thr Leu Ser Leu Glu Thr Gln Pro Leu Val Asn Thr Thr Asp Lys
229      85      90      95
230 Val His Glu Leu Met Lys Arg Leu Met Tyr Phe Ala Tyr Thr Val Gly
231      100      105      110
232 Leu Ser Leu Leu Thr Ala Ile Ser Thr Gln Arg Cys Leu Ser Val Leu
233      115      120      125
234 Phe Pro Ile Trp Phe Lys Cys His Arg Pro Arg His Leu Ser Ala Trp
235      130      135      140
236 Val Cys Gly Leu Leu Trp Thr Leu Cys Leu Leu Met Asn Gly Leu Thr
237 145      150      155      160
238 Ser Ser Phe Cys Ser Lys Phe Leu Lys Phe Asn Glu Asp Arg Cys Phe
239      165      170      175
240 Arg Val Asp Met Val Gln Ala Ala Leu Ile Met Gly Val Leu Thr Pro
241      180      185      190
242 Val Met Thr Leu Ser Ser Leu Thr Leu Phe Val Trp Val Arg Arg Ser
243      195      200      205
244 Ser Gln Gln Trp Arg Arg Gln Pro Thr Arg Leu Phe Val Val Val Leu
245      210      215      220
246 Ala Ser Val Leu Val Phe Leu Ile Cys Ser Leu Pro Leu Ser Ile Tyr
247 225      230      235      240
248 Trp Phe Val Leu Tyr Trp Leu Ser Leu Pro Pro Glu Met Gln Val Leu
249      245      250      255
250 Cys Phe Ser Leu Ser Arg Leu Ser Ser Ser Val Ser Ser Ser Ala Asn
251      260      265      270
252 Pro Val Ile Tyr Phe Leu Val Gly Ser Arg Arg Ser His Arg Leu Pro
253      275      280      285
254 Thr Arg Ser Leu Gly Thr Val Leu Gln Gln Ala Leu Arg Glu Glu Pro
255      290      295      300

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/509,484

DATE: 11/02/2005

TIME: 09:41:03

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\11022005\J509484.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date